



OIPE

## RAW SEQUENCE LISTING

DATE: 06/11/2002

PATENT APPLICATION: US/10/045,674

TIME: 14:27:29

Input Set : A:\Dyax2cp2.app

Output Set: N:\CRF3\06112002\J045674.raw

0333 Not Comply  
Corrected Diskette Needed

3 <110> APPLICANT: LADNER, ROBERT C.  
 4 COHEN, EDWARD H.  
 5 NASTRI, HORACIO G.  
 6 ROOKEY, KRISTIN L.  
 7 HOET, RENE  
 8 HOOGENBOOM, HENDRICUS R. J. M.  
 10 <120> TITLE OF INVENTION: NOVEL METHODS OF CONSTRUCTING LIBRARIES COMPRISING  
 11 DISPLAYED AND/OR EXPRESSED MEMBERS OF A DIVERSE FAMILY  
 12 OF PEPTIDES, POLYPEPTIDES OR PROTEINS AND THE NOVEL  
 13 LIBRARIES  
 15 <130> FILE REFERENCE: DYAX/002 CIP2  
 17 <140> CURRENT APPLICATION NUMBER: 10/045,674  
 18 <141> CURRENT FILING DATE: 2001-10-25  
 20 <150> PRIOR APPLICATION NUMBER: 09/198,069  
 21 <151> PRIOR FILING DATE: 2000-04-17  
 23 <150> PRIOR APPLICATION NUMBER: 09/837,306  
 24 <151> PRIOR FILING DATE: 2001-04-17  
 26 <160> NUMBER OF SEQ ID NOS: 635  
 28 <170> SOFTWARE: PatentIn Ver. 2.1  
 30 <210> SEQ ID NO: 1  
 31 <211> LENGTH: 17  
 32 <212> TYPE: DNA  
 33 <213> ORGANISM: Artificial Sequence  
 35 <220> FEATURE:  
 36 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 37 oligonucleotide  
 39 <400> SEQUENCE: 1  
 40 catgtgtatt actgtgc 17  
 43 <210> SEQ ID NO: 2  
 44 <211> LENGTH: 44  
 45 <212> TYPE: DNA  
 46 <213> ORGANISM: Artificial Sequence  
 48 <220> FEATURE:  
 49 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 50 oligonucleotide  
 52 <400> SEQUENCE: 2  
 53 cacatccgtg cttcttgac ggatgtggca cagtaataca catg 44  
 56 <210> SEQ ID NO: 3  
 57 <211> LENGTH: 18  
 58 <212> TYPE: DNA  
 59 <213> ORGANISM: Artificial Sequence  
 61 <220> FEATURE:  
 62 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

## RAW SEQUENCE LISTING

DATE: 06/11/2002

PATENT APPLICATION: US/10/045,674

TIME: 14:27:29

Input Set : A:\Dyax2cp2.app

Output Set: N:\CRF3\06112002\J045674.raw

```

63     oligonucleotide
65 <400> SEQUENCE: 3
66 gtgtattaga ctgctgcc                               18
69 <210> SEQ ID NO: 4
70 <211> LENGTH: 43
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
76     oligonucleotide
78 <400> SEQUENCE: 4
79 ggcagcagtc taatacacca catccgtggtt ctccacggat gtg       43
82 <210> SEQ ID NO: 5
83 <211> LENGTH: 47
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
89     oligonucleotide
91 <400> SEQUENCE: 5
92 cacatccgtg ttgtttacac ggatgtggtg tottacagtc cattctg   47
95 <210> SEQ ID NO: 6
96 <211> LENGTH: 20
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
102     oligonucleotide
104 <400> SEQUENCE: 6
105 cagaatggac tgtaagacac                               20
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 43
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
115     oligonucleotide
117 <400> SEQUENCE: 7
118 atcgagtctc actgagccac atccgtggtt ttccacggat gtg       43
121 <210> SEQ ID NO: 8
122 <211> LENGTH: 17
123 <212> TYPE: DNA
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
128     oligonucleotide
130 <400> SEQUENCE: 8
131 gctcagtgag actcgat                                   17
134 <210> SEQ ID NO: 9

```

## RAW SEQUENCE LISTING

DATE: 06/11/2002

PATENT APPLICATION: US/10/045,674

TIME: 14:27:29

Input Set : A:\Dyax2cp2.app

Output Set: N:\CRF3\06112002\J045674.raw

135 <211> LENGTH: 24  
 136 <212> TYPE: DNA  
 137 <213> ORGANISM: Artificial Sequence  
 139 <220> FEATURE:  
 140 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 141     oligonucleotide  
 143 <220> FEATURE:  
 144 <221> NAME/KEY: modified\_base  
 145 <222> LOCATION: (10)..(24)  
 146 <223> OTHER INFORMATION: A, T, C, G, other or unknown  
 148 <400> SEQUENCE: 9  
 149 cacgaggagn nnnnnnnnnnn nnnn 24  
 152 <210> SEQ ID NO: 10  
 153 <211> LENGTH: 19  
 154 <212> TYPE: DNA  
 155 <213> ORGANISM: Artificial Sequence  
 157 <220> FEATURE:  
 158 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 159     oligonucleotide  
 161 <400> SEQUENCE: 10  
 162 atgaccgaat tgctacaag 19  
 165 <210> SEQ ID NO: 11  
 166 <211> LENGTH: 46  
 167 <212> TYPE: DNA  
 168 <213> ORGANISM: Artificial Sequence  
 170 <220> FEATURE:  
 171 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 172     oligonucleotide  
 174 <400> SEQUENCE: 11  
 175 gactcctcag cttcttgctg aggagtcctt gtagcaattc ggtcat 46  
 178 <210> SEQ ID NO: 12  
 179 <211> LENGTH: 6  
 180 <212> TYPE: PRT  
 181 <213> ORGANISM: Artificial Sequence  
 183 <220> FEATURE:  
 184 <223> OTHER INFORMATION: Description of Artificial Sequence: 6 His tag  
 186 <400> SEQUENCE: 12  
 187 His His His His His His  
 188     1                     5  
 191 <210> SEQ ID NO: 13  
 192 <211> LENGTH: 10  
 193 <212> TYPE: DNA  
 194 <213> ORGANISM: Artificial Sequence  
 196 <220> FEATURE:  
 197 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 198     oligonucleotide  
 200 <220> FEATURE:  
 201 <221> NAME/KEY: modified\_base  
 202 <222> LOCATION: (6)..(10)

## RAW SEQUENCE LISTING

DATE: 06/11/2002

PATENT APPLICATION: US/10/045,674

TIME: 14:27:29

Input Set : A:\Dyax2cp2.app

Output Set: N:\CRF3\06112002\J045674.raw

```

203 <223> OTHER INFORMATION: A, T, C, G, other or unknown
205 <400> SEQUENCE: 13
206-> 206..gtctcnnnnn 10
209 <210> SEQ ID NO: 14
210 <211> LENGTH: 11
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
216     oligonucleotide
218 <220> FEATURE:
219 <221> NAME/KEY: modified_base
220 <222> LOCATION: (1)..(6)
221 <223> OTHER INFORMATION: A, T, C, G, other or unknown
223 <400> SEQUENCE: 14
224-> 224 nnnnnngaga c 11
227 <210> SEQ ID NO: 15
228 <211> LENGTH: 24
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
234     oligonucleotide
236 <220> FEATURE:
237 <221> NAME/KEY: modified_base
238 <222> LOCATION: (11)..(24)
239 <223> OTHER INFORMATION: A, T, C, G, other or unknown
241 <400> SEQUENCE: 15
242-> 242 cacgcatgtg nnnnnnnnnn nnnn 24
245 <210> SEQ ID NO: 16
246 <211> LENGTH: 24
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
252     oligonucleotide
254 <220> FEATURE:
255 <221> NAME/KEY: modified_base
256 <222> LOCATION: (1)..(14)
257 <223> OTHER INFORMATION: A, T, C, G, other or unknown
259 <400> SEQUENCE: 16
260-> 260 nnnnnnnnnn nnnncacatc cgtg 24
263 <210> SEQ ID NO: 17
264 <211> LENGTH: 14
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
270     oligonucleotide

```

## RAW SEQUENCE LISTING

DATE: 06/11/2002

PATENT APPLICATION: US/10/045,674

TIME: 14:27:29

Input Set : A:\Dyax2cp2.app

Output Set: N:\CRF3\06112002\J045674.raw

```

272 <400> SEQUENCE: 17
273 gtgtattact gtgc 14
276 <210> SEQ ID NO: 18
277 <211> LENGTH: 34
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
283     oligonucleotide
285 <400> SEQUENCE: 18
286 cacatccgtg cacggatgtg gcacagtaat acac 34
289 <210> SEQ ID NO: 19
290 <211> LENGTH: 14
291 <212> TYPE: DNA
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
296     oligonucleotide
298 <400> SEQUENCE: 19
299 gtgtattaga ctgc 14
302 <210> SEQ ID NO: 20
303 <211> LENGTH: 34
304 <212> TYPE: DNA
305 <213> ORGANISM: Artificial Sequence
307 <220> FEATURE:
308 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
309     oligonucleotide
311 <400> SEQUENCE: 20
312 gcagtctaatacaccacatc cgtgcacgga tgtg 34
315 <210> SEQ ID NO: 21
316 <211> LENGTH: 34
317 <212> TYPE: DNA
318 <213> ORGANISM: Artificial Sequence
320 <220> FEATURE:
321 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
322     oligonucleotide
324 <400> SEQUENCE: 21
325 cacatccgtg cacggatgtg gtgtcttaca gtcc 34
328 <210> SEQ ID NO: 22
329 <211> LENGTH: 14
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial Sequence
333 <220> FEATURE:
334 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
335     oligonucleotide
337 <400> SEQUENCE: 22
338 ggactgtaag acac 14
341 <210> SEQ ID NO: 23
342 <211> LENGTH: 34

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/045,674

DATE: 06/11/2002  
TIME: 14:27:30

Input Set : A:\Dyax2cp2.app  
Output Set: N:\CRF3\06112002\J045674.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 10,11,12,13,14,15,16,17,18,19,20,21,22,23,24  
Seq#:13; N Pos. 6,7,8,9,10  
Seq#:14; N Pos. 1,2,3,4,5,6  
Seq#:15; N Pos. 11,12,13,14,15,16,17,18,19,20,21,22,23,24  
Seq#:16; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14  
Seq#:85; N Pos. 3,4,5,6,7,8,9  
Seq#:86; N Pos. 4,5,6,7  
Seq#:87; N Pos. 6,7,8,9,10,11  
Seq#:88; N Pos. 1,2,3,4,5,6  
Seq#:89; N Pos. 4,5,6,7  
Seq#:90; N Pos. 3,9,12,21,30,33,39,51,57,60,69,72,75,87  
Seq#:346; N Pos. 1,2,3,4,5,6  
Seq#:347; N Pos. 6,7,8,9,10,11  
Seq#:348; N Pos. 3,4,5,6,7,8,9  
Seq#:349; N Pos. 7,8,9,10,11  
Seq#:356; N Pos. 8,9,10,11,12,13,14,15  
Seq#:357; N Pos. 7,8,9,10,11,12,13,14,15,16,17  
Seq#:358; N Pos. 7,8,9,10,11,12,13,14,15,16,17  
Seq#:359; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17  
Seq#:360; N Pos. 7,8,9,10,11,12  
Seq#:361; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22  
Seq#:362; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18,19  
Seq#:363; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18  
Seq#:364; N Pos. 7,8,9,10,11,12  
Seq#:365; N Pos. 7,8,9,10,11  
Seq#:366; N Pos. 6,7,8,9,10  
Seq#:367; N Pos. 6,7,8,9,10,11  
Seq#:368; N Pos. 7,8,9,10,11,12,13,14,15,16  
Seq#:369; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18,19  
Seq#:370; N Pos. 7,8,9,10,11,12,13,14  
Seq#:371; N Pos. 7,8,9,10,11,12,13,14,15,16,17  
Seq#:372; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22  
Seq#:373; N Pos. 6,7,8,9,10,11  
Seq#:374; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18  
Seq#:375; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22  
Seq#:376; N Pos. 6,7,8,9,10,11,12,13,14,15  
Seq#:377; N Pos. 6,7,8,9,10,11,12,13  
Seq#:378; N Pos. 6,7,8,9,10,11,12,13  
Seq#:379; N Pos. 6,7,8,9,10  
Seq#:380; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26  
Seq#:381; N Pos. 5,6,7,8,9,10,11  
Seq#:382; N Pos. 6,7,8,9,10  
Seq#:383; N Pos. 7,8,9,10,11,12,13,14,15,16,17,18  
Seq#:384; N Pos. 6,7,8,9,10,11,12,13,14

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/045,674

DATE: 06/11/2002  
TIME: 14:27:30

Input Set : A:\Dyax2cp2.app  
Output Set: N:\CRF3\06112002\J045674.raw

Seq#:385; N Pos. 6,7,8,9,10,11,12,13  
Seq#:386; N Pos. 5,6,7,8,9,10,11,12  
Seq#:387; N Pos. 6,7,8,9,10,11,12,13,14,15,16,17,18,19  
Seq#:388; N Pos. 7,8,9,10,11,12,13,14,15,16,17  
Seq#:389; N Pos. 7,8,9,10,11,12,13,14,15,16,17  
Seq#:390; N Pos. 7,8,9,10,11,12,13,14,15,16,17  
Seq#:420; N Pos. 5,6,7,8,9  
Seq#:421; N Pos. 4,5,6,7,8,9,10,11,12  
Seq#:422; N Pos. 4,5,6,7,8,9  
Seq#:423; N Pos. 4,5,6,7,8  
Seq#:424; N Pos. 4,5,6,7  
Seq#:425; N Pos. 4,5,6,7,8  
Seq#:426; N Pos. 4,5,6,7,8  
Seq#:427; N Pos. 7,8,9,10,11,12  
Seq#:428; N Pos. 4,5,6,7,8,9  
Seq#:429; N Pos. 4,5,6,7,8  
Seq#:430; N Pos. 1,2,3,4,5,6  
Seq#:431; N Pos. 4,5,6,7,8,9  
Seq#:432; N Pos. 4,5,6,7  
Seq#:433; N Pos. 7,8,9,10,11  
Seq#:434; N Pos. 1,2,3,4,5,6,7,8,9,10  
Seq#:435; N Pos. 1,2,3,4,5,6,7,8,9  
Seq#:436; N Pos. 5,6,7,8,9  
Seq#:437; N Pos. 4,5,6,7,8,9  
Seq#:438; N Pos. 4,5,6,7,8,9  
Seq#:439; N Pos. 4,5,6,7,8,9  
Seq#:440; N Pos. 4,5,6,7,8  
Seq#:441; N Pos. 4,5,6,7,8  
Seq#:442; N Pos. 4,5,6,7  
Seq#:443; N Pos. 1,2,3,4,5,6  
Seq#:444; N Pos. 7,8,9,10,11,12  
Seq#:445; N Pos. 4,5,6,7,8  
Seq#:446; N Pos. 7,8,9,10,11  
Seq#:447; N Pos. 4,5,6,7,8  
Seq#:448; N Pos. 4,5,6,7,8,9,10,11,12  
Seq#:449; N Pos. 1,2,3,4,5,6,7,8,9,10  
Seq#:450; N Pos. 1,2,3,4,5,6,7,8,9  
Seq#:496; N Pos. 22,23,24,28,29,30,34,35,36  
Seq#:497; N Pos. 19,20,21,25,26,27,28,29,30,40,41,42,46,47,48  
Seq#:499; N Pos. 4,5,6,7  
Seq#:500; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15  
Seq#:501; N Pos. 4,5,6,7,8  
Seq#:502; N Pos. 4,5,6,7  
Seq#:503; N Pos. 1,2,3,4,5,6,7  
Seq#:504; N Pos. 7,8,9,10,11,12  
Seq#:505; N Pos. 4,5,6,7,8,9  
Seq#:506; N Pos. 4,5,6,7,8  
Seq#:507; N Pos. 7,8,9,10,11  
Seq#:508; N Pos. 4,5,6,7,8

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/045,674

DATE: 06/11/2002  
TIME: 14:27:30

Input Set : A:\Dyax2cp2.app  
Output Set: N:\CRF3\06112002\J045674.raw

Seq#:509; N Pos. 4,5,6,7,8  
Seq#:510; N Pos. 4,5,6,7,8,9  
Seq#:511; N Pos. 4,5,6,7,8  
Seq#:512; N Pos. 1,2,3,4,5,6,7,8,9  
Seq#:513; N Pos. 7,8,9,10,11  
Seq#:514; N Pos. 5,6,7,8,9  
Seq#:515; N Pos. 4,5,6,7,8,9,10,11,12  
Seq#:516; N Pos. 7,8,9,10,11  
Seq#:517; N Pos. 1,2,3,4,5,6  
Seq#:518; N Pos. 1,2,3,4,5,6,7,8,9,10  
Seq#:519; N Pos. 7,8,9,10,11,12,13,14,15,16  
Seq#:520; N Pos. 4,5,6,7,8  
Seq#:521; N Pos. 4,5,6,7,8,9  
Seq#:558; N Pos. 1,2,3,4,5,6,7,8,9  
Seq#:559; N Pos. 7,8,9,10,11  
Seq#:560; N Pos. 4,5,6,7  
Seq#:561; N Pos. 7,8,9,10,11,12,13,14,15,16  
Seq#:562; N Pos. 1,2,3,4,5,6,7,8,9,10  
Seq#:563; N Pos. 7,8,9,10  
Seq#:564; N Pos. 1,2,3,4,5  
Seq#:565; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15  
Seq#:566; N Pos. 4,5,6,7,8,9  
Seq#:567; N Pos. 7,8,9,10,11  
Seq#:568; N Pos. 7,8,9,10,11,12  
Seq#:569; N Pos. 4,5,6,7,8,9  
Seq#:570; N Pos. 4,5,6,7,8  
Seq#:571; N Pos. 7,8,9,10,11  
Seq#:572; N Pos. 4,5,6,7,8  
Seq#:573; N Pos. 4,5,6,7,8  
Seq#:574; N Pos. 4,5,6,7,8  
Seq#:575; N Pos. 4,5,6,7,8,9,10,11,12  
Seq#:576; N Pos. 5,6,7,8,9  
Seq#:577; N Pos. 4,5,6,7,8,9  
Seq#:578; N Pos. 4,5,6,7,8  
Seq#:579; N Pos. 4,5,6,7  
Seq#:580; N Pos. 4,5,6,7,8,9,10,11,12  
Seq#:581; N Pos. 4,5,6,7,8  
Seq#:619; N Pos. 4,5,6,7  
Seq#:625; N Pos. 7,8,9,10